



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,445	10/26/2001	Thomas E. Allen	M4605.002	3556

23875 7590 07/07/2003

MOLLY D MCKAY, PC
3207 E 22ND STREET
TULSA, OK 74114-1823

EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 07/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,445

Applicant(s)

ALLEN, THOMAS E.

Examiner

David L. Sorkin

Art Unit

1723

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-11 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 12-14 is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 1-18 in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Applicant is advised that should claim 3 be found allowable, claim 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Though at first glance claims 3 and 16 may appear different, when these dependent claims are properly considered, including all the limitations of the claims from which they depend, they cover identical subject matter.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9, 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

Art Unit: 1723

5. In claims 9 and 18, there is lack of antecedent basis for "the means for pressurizing the upstream area at constant pressure". This phrase suggests that claims from which claims 9 and 18 depend invokes section 112, sixth paragraph by requiring "means for pressurizing..."; however, such is not the case. While claims 3 and 11, from which claims 9 and 18 respectively depend, mention the intention that "said upstream area [is] pressurized with constant pressure", no "means" for accomplishing the function is required.

6. In claim 17, there is lack of antecedent basis for "the inwardly tapered portion". Though claim 15 recites an inwardly tapered portion, claim 17 does not depend from claim 15. It is unclear if an "inwardly tapered portion" is a required element of the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1-5, 10, 11 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nedderman (US 5,758,691). Regarding claim 1, Nedderman ('691) discloses an automatically adjusting annular jet mixer comprising a stationary hollow housing (14, including 34) and a hollow inner nozzle member (12) that moves axially within the housing along a centerline of the housing in proportional response to variations in pressure of supply fluid flowing to the housing (see col. 2 line 52 to col. 3 line 2). While Nedderman (US 5,758,691) discloses the fluid being a polymer solution

Art Unit: 1723

rather than "water" which is recited in the claim, "the manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself" *In re Casey* 152 USPQ 235 (CCPA 1967). Also, [e]xpressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claims" *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) and "inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims" *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Regarding claim 2, the inner nozzle member (12) is attached on one end to a pipe (threaded shoulder piece 30) having an inlet opening (see Figs. 1 and 2) for introducing material into the inner nozzle member, said housing (14) having a supply inlet (16) that admits fluid to a downstream area (18) located between the housing (14) and the inner nozzle member (12), a nozzle opening (32) continuous with said downstream area (18), said nozzle opening (32) formed between a discharge end (20) of the inner nozzle member (12) and the housing (14) to allow supply fluid to flow via the nozzle opening (32) to contact material flowing through the inner nozzle member (12). While use of the apparatus in conjunction with the materials discussed in the claim is not disclosed, the claim is still considered to be anticipated, based upon the decisions of *In re Casey*, *Ex parte Thibault*, and *In re Otto* quoted above in the rejection of claim 1. Regarding claim 3, an upstream area (in which spring 22 is located, see Fig. 1) is formed between the housing (14) and the inner nozzle member (12) and is separated from the downstream area (18) by a piston (the flange portion of 12 in which the more downstream of o-rings 28 is located, see Fig. 1), said piston encircles and attaches to

Art Unit: 1723

the inner nozzle member (12) and said piston movably engaging an inner surface of said housing (14) so that the piston and inner nozzle member automatically move axially within the housing (14) in response to variations in supply pressure in the downstream area (18) (see col. 2, lines 1-16 and col. 2 line 43 to col. 3 line 2 ; Figs. 1 and 2). While the reference does not discuss a step of pressurizing the upstream area with a constant pressure as discussed in the claim, "the manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself" *In re Casey supra*. Regarding claim 4, said discharge end (20) of said inner nozzle member (12) is provided with a tapered section (see Figs. 1 and 2) that cooperates with an inwardly tapered portion (24) of the housing (14) to form the nozzle opening (32). Regarding claim 5, said housing is provided with an outwardly expanding tapered portion (34) located adjoining the inwardly tapered portion (24) and located between the inwardly tapered portion (24) and an exit opening of the housing (see Fig. 1). Regarding claim 10, Nedderman ('691) discloses an automatically adjusting annular jet mixer comprising a hollow stationary mixer housing (14 including 34), and a hollow inner nozzle member (12) that moves within the housing along a centerline of the housing in proportional response to variations in pressure of supply fluid flowing to the housing, (see col. 2, lines 1-16 and col. 2 line 52 to col. 3 line 2; Fig. 1 vs. Fig. 2), said housing (14) having a supply inlet (16) that admits fluid to a downstream area (18) located between the housing (14) and the inner nozzle member (12), a nozzle opening (32) continuous with said downstream area (18), said nozzle opening (32) formed between a discharge end (20) of the inner nozzle member (12) and the housing (14) to allow

Art Unit: 1723

supply fluid to flow via the nozzle opening (32) to contact material flowing through the inner nozzle member (12). While use of the apparatus in conjunction with the materials discussed in the claim is not disclosed, the claim is still considered to be anticipated, based upon the decisions of *In re Casey*, *Ex parte Thibault*, and *In re Otto* quoted above in the rejection of claim 1. Regarding claim 11, an upstream area (in which spring 22 is located, see Fig. 1) is formed between the housing (14) and the inner nozzle member (12) and is separated from the downstream area (18) by a piston (the flange portion of 12 in which the more downstream of o-rings 28 is located, see Fig. 1), said piston encircles and attaches to the inner nozzle member (12) and said piston movably engaging an inner surface of said housing (14) so that the piston and inner nozzle member automatically move axially within the housing (14) in response to variations in supply pressure in the downstream area (18) (see col. 2, lines 1-16 and col. 2 line 43 to col. 3 line 2 ; Figs. 1 and 2). While the reference does not discuss a step of pressurizing the upstream area with a constant pressure as discussed in the claim, "the manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself" *In re Casey* supra. Regarding claim 15, said discharge end (20) of said inner nozzle member (12) is provided with a tapered section (see Figs. 1 and 2) that cooperates with an inwardly tapered portion (24) of the housing (14) to form the nozzle opening (32). Regarding claim 16, the inner nozzle member (12) is attached on one end to a pipe (threaded shoulder piece 30) having an inlet opening (see Figs. 1 and 2) for introducing material into the inner nozzle member. Regarding claim 17, said housing is provided with an outwardly expanding tapered portion (34)

Art Unit: 1723

located adjoining the inwardly tapered portion (24) and located between the inwardly tapered portion (24) an exit opening of the housing (see Fig. 1).

Allowable Subject Matter

9. Claims 6-8 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art is Nedderman (US 5,758,691). Regarding claims 6-8 and 12, the claimed helical groove in the piston is not disclosed by Nedderman ('691). While a helical groove in piston for providing lubricant flow is not by itself new (see Breunich (US 3,342,959), one of ordinary skill in the art would not have been motivated to provide the piston of Nedderman ('691) with such a groove, especially considering that the piston of Nedderman ('691) is always sealed by o-ring 28. Regarding claims 13 and 14, the claimed alignment member having an arm parallel to the inner nozzle member and traveling pin retained in a groove of the inner nozzle is not disclosed by Nedderman ('691), nor does the prior art fairly teach or suggest such a modification of Nedderman ('691).

10. Claims 9 and 18 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The closest prior art is Nedderman (US 5,758,691). However, Nedderman (US 5,758,691) does not disclose a pressure regulating valve to regulate supply to the "upstream area". Because nothing is

Art Unit: 1723

supplied to the "upstream area" of Nedderman (US 5,758,691) there would be no motivation to provide such a regulating valve.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



David Sorkin

June 26, 2003